

HOW TO DETECT  
COUNTERFEIT  
BANK NOTES.











HOW TO DETECT  
COUNTERFEIT BANK NOTES:

OR, AN ILLUSTRATED TREATISE

ON THE DETECTION OF

COUNTERFEIT, ALTERED, AND SPURIOUS  
BANK NOTES,

WITH ORIGINAL BANK NOTE PLATES AND DESIGNS,

BY

RAWDON, WRIGHT, HATCH & EDSON,

BANK NOTE ENGRAVERS, OF NEW-YORK.

THE WHOLE FORMING

AN UNERRING GUIDE, BY WHICH EVERY PERSON CAN, ON EXAMINATION, DETECT  
SPURIOUS BANK NOTES OF EVERY DESCRIPTION, NO MATTER HOW  
WELL EXECUTED THEY MAY APPEAR.

BY GEORGE PEYTON, EXCHANGE BROKER.

NEW-YORK:

PUBLISHED FOR THE AUTHOR.

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Entered according to Act of Congress, in the year 1856,

By GEORGE PEYTON,

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## P R E F A C E .

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In a work of this description, whose title is "How to DETECT COUNTERFEIT BANK NOTES," a preface is hardly necessary, because, if the book possesses any merit it will immediately commend itself to the business public. I would state, however, as all works on this subject, hitherto published, have been based entirely upon statistical information, which, at best, is of little value, that this is written, with a view of not only enabling all who take an interest in the subject to become experts in the science of detecting fraudulent bank notes, but also to make them conscious of the method by which they become so ; its success will, therefore, depend, in a degree, upon the intelligence of those who may consult it. I have condensed the letter-press, and avoided technicalities, as much as possible ; though, from the nature of the work, I have been forced into repetitions, which however essential, always mar, in a literary point of view, the symmetry of the treatise ; and, in conclusion, if, through its instrumentality, any persons are enabled to claim the unquestionable advantages which a correct knowledge of bank notes confers, I shall be amply compensated for any labor that may have been expended in its production.

NO. 418 BROADWAY,  
*March, 1856.*



## INTRODUCTION.

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In presenting this small volume to the public, I feel confident that, if it contained nothing but the plates, it would be exceedingly serviceable to those who might peruse it. Proficiency in any art or science, must always be the result of practical experience; and although the knowledge by which we perceive the difference between the counterfeit bank note and the genuine one, cannot be strictly called a science, yet it can only be acquired by attentive observation of certain laws, which we always see harmonized in the genuine, and transgressed in the counterfeit; and as no language, no matter how lucid, can convey to the mind an adequate conception of what those laws are, I have had engraved by Messrs. Rawdon, Wright, Hatch & Edson, the accompanying bank note designs, or illustrations, which are of so general a character as to embody all the particulars that make up the genuine bank note. To fully appreciate the advantage which these plates offer, it will be necessary to know that there is a standard of excellence in bank note engraving, at which all, who claim the

title of bank note engravers, must arrive before their ability can be acknowledged. With the present few established firms, which, I believe, constitute all the bank note engravers in the United States, this ability, both in design and execution, is beyond question; and the degree of excellence to which bank note engraving has been brought, is about equal with each of them; hence, comparatively, no difference can be discovered between any branch of it, engraved by one firm, and a similar one engraved by another: thus establishing a general uniformity by which the characteristics of *all* can be acquired by learning those of *any one*.

This will appear evident, by considering the following branches which are used in the formation of a note.

1st.—The round hand, “will pay on demand to the bearer,” is the same in all bank notes—that is to say, the curves and hair lines are drawn with mathematical accuracy, and though there may be occasionally a slight difference in the *style* of letter, yet a comparison of the curves and hair lines, one with another, will instantly disclose the precision to which I allude.

2nd.—The shading of letters and all the parallel ruling on the notes, are executed by the parallel ruling machine, used by all bank note engravers, consequently the work is the same.

3rd.—The geometrical lathe work—that is the ends,

borders, counters, &c., though apparently dissimilar—springs from a common origin, and is essentially the same, being like the various patterns in lace, in each of which the same thread, though differently woven, is used.

4th.—The bas-relief is made by similar machinery, and necessarily presents the same appearance in all genuine work.

5th.—The human figures which form the principal characteristic in vignettes, are drawn in accordance with a certain ideal standard of perfection; and, as this is one and the same with all artists, no essential difference can possibly exist between their productions in this particular.

It will now be manifest that an intimate acquaintance with the engraved illustrations, aided by the explanatory text connected with them, will insure a skill in judging of bank notes, that can only otherwise be acquired by years of practical familiarity with the *routine* of a Broker's business.



## HOW TO DETECT COUNTERFEIT BANK NOTES.\*

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Fifteen years' active experience in the exchange business, has convinced me, conclusively, that the multiplicity of counterfeit, altered and spurious bank notes, which have, from time to time, been forced into our circulating currency, has been owing more to the very imperfect knowledge we possess of what constitutes good bank note engraving, than to any ability, in point of workmanship, displayed by the counterfeiter in producing those fraudulent issues.

So diffused, indeed, is this ignorance, that not one per cent. of the community knows the object or character of those beautiful devices which are to be found on every genuine bank note, and which constitute the only safeguard against fraud it can furnish. With the remaining ninety-nine per cent., paper money is strictly enigmatical. Some judge from the first impression their minds receive on glancing at a note; others place great faith in pin holes;

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*Counterfeit notes* are those which are fac-similes of the genuine.

*Spurious notes* are those which differ entirely from the genuine.

*Altered notes* are those whose title, locality, or denomination, has been extracted and some other one pasted or printed in its place.



others, again, consider certain conditions of the ends, whether they be thumbed or not, infallible. Numerous other methods might be mentioned, if it were at all necessary, which would show the apparently hopeless condition we are in respecting a correct knowledge of our paper currency. The cause of this confusion unquestionably arises from the multitude of banks issuing notes, together with the universal idea, that to be a good judge of paper money, it is essential to be acquainted with each individual issue in the country. I shall endeavor to prove that this idea is as erroneous as it is impracticable, and that a correct and certainly rational method may be determined from investigating and reducing the science of bank note engraving to a few fundamental principles, which must, from the peculiarity of the present style, enter into and form an integral part of each genuine bank note issued.

Every science originates in fixed and definite principles, and in the most abstruse, these are few and simple.

Botany was so admirably systematized by the celebrated Linnæus, that a few hours' attentive study affords the student as much knowledge of the science as so many years under the old method.

And that profound anatomist, Cuvier, informs us, "that if you have but the extremity of a bone well preserved, you may, by attentive consideration, and the aid of the resources which anatomy furnishes to skill, determine all



the rest quite as well as if you had the entire skeleton submitted to you."

And without wishing to connect this trifle, even in a comparative point of view, with the sciences just mentioned, I would state that a bank note can be as accurately determined, in the majority of cases, from an inch of the engraving, as if the entire note were present.

The remarkable facility with which a broker will detect a bad note, whether he has ever before seen it, or not, would prove that the difference between the genuine and the counterfeit is of an exceedingly intelligible nature.

It is a truth, beyond dispute, that the counterfeit note has never yet been made, which on close examination did not disclose its base origin. And as this is universally admitted by every person who has had experience in bank notes, I think no better evidence can be required to prove that the present system of bank note engraving, *if it were generally understood*, is essentially perfect in every respect. The many calumnies that have been circulated by interested parties, in reference to the present style of engraving, have long since died natural deaths. Occasionally, however, some adventurer brings out a new method of engraving bank notes, and, of course, denounces the present one, in the most vehement manner, but without success.

Two or three years since, an engraver of this city, supposed he had hit upon a method which was perfect, and

wrote a book to prove its value, but, I believe it has been but in one instance adopted. Indeed it would be a very difficult matter to invent a method, or system of engraving bank notes, that would be superior to the one used at the present time, in consequence, among other reasons, of its admirable divisions of labor, by which the various parts of the note are engraved by different artists, each one making a speciality of his part, and consequently not only excelling in execution, but naturally checking each other, if any is disposed to be a rogue.

But however perfect the system of bank note engraving may be, there will always be more or less attempts at counterfeiting, and until the community are instructed as to what constitutes good engraving, and become familiar with the characteristics of genuine bank notes, they cannot be capable of protecting themselves from counterfeits.

Impressed with this view of the matter, and which every hour's experience confirms, I have in the following pages endeavored to familiarize the reader with the basis upon which all genuine notes are constructed, confident that with a little attention to the points laid down, he will rapidly master a science that has hitherto been considered by the mass of the population incomprehensible.

The first point which I would impress on the reader's mind, is the important fact to which I have alluded in the

introduction, that all bank note engraving executed at the present day is substantially alike.

The numerous circles, ovals, ellipses, ends, borders, and backs, are one and all, in every instance, composed of a net-work of lines, which, by crossing each other at certain angles, produce the endless variety of geometrical figures above classified. It must be strictly borne in mind that the *shape of the figure*, whether it be a circle, octagon, or any other, must not be taken into consideration; *the fine line alone* is the unit which constitutes this description of engraving, and by which all imitations can readily be detected. This will appear more evident when I state, that in all counterfeit work the lines are coarse and irregular, and cross each other in a confused manner; consequently producing blurred and imperfect figures. In all genuine notes, the parallel lines which are used for shading the letters, and for various "backs," are fine, clear, and strictly parallel. In the counterfeit these are coarse and imperfect, and in many cases have the appearance of having been put on with a brush.

In the medallion ruling or bas-relief in the genuine note, the lines are waved, and appear raised from the surface, producing a beautiful effect.

In the counterfeit, these lines are scratchy and decidedly imperfect.

It will be seen from the foregoing, that the *lines when*

*woven* compose geometrical figures; *when parallel*, compose the various shadings; and when *waved*, compose the bas-relief. With a little practice on *genuine designs*, the reader will become so familiar with their quality and construction as to detect the closest imitation.

I have thus given a brief outline of the MECHANICAL division of bank note engraving, which constitutes at least the half of every bank note issued; I shall now call attention to the ARTISTICAL division, which constitutes the other half, and completes the note. The vignettes, or in ordinary language, the pictures which embellish bank notes, comprise this division of engraving. From its general nature it cannot be reduced to any positive unit; yet sufficient may be derived from its leading principles, to determine very accurately the quality of the work.

The beauty of form and expression, arising from a perception of utility, or of fitness of certain means to produce a certain end, may be observed both in animate and inanimate objects—in the works of nature and art. In animate beings we are gratified by recognising that a certain form is suited to the wants of the animal, and that certain desired effects or motions, are produced with ease, or little effort. It is on this principle that we admire the beauty of the human form, every part of which is perfectly fitted for its intended purpose; and that we admire the motions of a horse, a stag, or a greyhound, as being made without



any apparent difficulty, and as the result of a power which accomplishes its end with the least possible exertion.

The same feeling which makes us take pleasure in movements and forms indicating ease, leads us likewise to dislike those which express constraint and toil: hence, both in nature and art, all forced and labored attitudes, all tension of muscle, all visible and over-strained efforts to produce a certain effect, or to express a certain feeling, are offensive to taste. And thus all angular, or jerking action, and all heavy dragging of the limbs, are devoid of beauty, as being signs of violent and toilsome effort, and as being opposite to that equable, flowing, and easy motion in which grace consists.

And this may be further exemplified by considering the beauty and unity of the features of the human countenance; and although we may labor under the indifference which familiarity generally creates, and overlook their perfection, yet, if a deformity presents itself—say the absence of the nose—a feeling of intense commiseration is immediately excited, which the other features, no matter how beautiful they may be, cannot relieve. And thus it is with inanimate objects, whether in nature or art: in viewing a landscape, either natural, or on canvas, the mere sensual gratification of the eye is comparatively so small as scarcely to be attended to; but yet, if there occur a single spot offensively harsh, or glaring, all the magic instantly vanishes,

and the imagination avenges the injury offered to the senses. The glaring and inharmonious spot, being the most prominent and obtrusive, irresistibly attracts the attention, so as to interrupt the repose of the whole, and leave the mind no place to rest upon.

Acting upon these general principles, the vignette designer introduces into his picture certain combinations of figures, which, from their local character, are familiar to every eye; and whose beauty and expression require the utmost skill and ability of the engravers to develop their characteristics naturally and gracefully. Hence human figures are the most prominent, and upon which the most reliance is placed. Next come domestic animals, with whose outlines and beautiful proportions, every body is supposed to be acquainted; a landscape will now be necessary to show the figures to advantage; and this in turn must have the usual quantity of water, sky, and perspective.

It will be seen, then, that the counterfeiter, in order to be successful, must be a master of at least a dozen different branches of engraving; and as this is impossible, even with a professional artist, it must be considered beyond dispute, that the counterfeit vignette will exhibit the imperfections which usually characterize base imitations. I shall presently enter into a detail of this subject, which will make the reader perfectly familiar with what constitutes a genuine bank note.

## THE PLATES.

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The steel plates which illustrate this work were engraved, as the reader will perceive, by the eminent house of Rawdon, Wright, Hatch & Edson, of this city, which has, for the last thirty years, by the beauty and artistic superiority of the bank note engraving executed by it, successfully resisted, strictly speaking, the many attempts to imitate its work.

The plates, it may be proper to state, were engraved on condition that they should remain in their hands, to be destroyed when the impressions were printed.

It appears that every order for engraving is investigated in the most rigorous manner, and no price can purchase an atom of their work, until the party applying is ascertained beyond doubt to be acting in good faith and for a legitimate purpose.

Their sources of information, in consequence of the extent of their business, which compels them to have branches in the principal cities, are so reliable, that the character of an individual, or an institution may be obtained in a few hours' notice.

No. 1, is Cupid rolling a dollar; a village, and rail-road

cars in the distance. The principal object of this vignette is to show the admirable manner in which what is technically called "*flesh-work*" is executed: and as this branch is the pinnacle of vignette engraving, it may be proper to state that it has never been successfully counterfeited.

It will be perceived that the texture of the skin is represented by *fine dots and lines*—an admixture to be found in every vignette; and, as their fineness and regularity determine the quality of the work, it will be exceedingly beneficial to the reader if he will occasionally examine them attentively; and thus by educating the eye on genuine work, enable it, in a very short time, to detect the best imitations.

No. 2, is a group of females, emblematic of commerce, agriculture, and manufactures, whose chaste outline, beauty of expression, and artistic execution, cannot be excelled.

Their arms, necks, and feet are *bare*, in consequence of the insurmountable difficulty experienced by counterfeiters in endeavoring to execute these parts.

No. 3, represents the United States Mail steamship Baltic in a gale of wind; the action of the wind and water is delineated in a masterly manner.

No. 4—"The Mechanic." The expression of the countenance is admirable; he is evidently constructing, in his mind's eye, some new labor-saving machine; the *arm* and



*fingers* are well developed ; the figures in the back-ground present a natural and expressive outline.

No. 5—An agricultural scene :—the farmer ploughing ; the horses are drawn to the life ; the one in the background is well executed. It will be seen that in the human figure, the *eye*, *mouth*, *hands* and *attitude* are perfectly natural.

No. 6, is a very pretty sketch, showing sky, still water, and shrubbery.

No. 7—A marine view : the ships under canvas and the action of the water are very spirited.

No. 8—A locomotive and train of cars. This vignette is very popular at the present day, owing, no doubt, to the spirited appearance which it presents, together with the intricate nature of the machinery and the architecture of the cars, which require no ordinary ability to execute.

No. 9—A distant view of a house, such as is usually given in vignettes, showing the proportion and architecture in a very neat manner.

No. 10, is a portrait of a beautiful female, exquisitely finished ; the *texture* of the skin can be seen here in perfection ; the *hair*, showing the *strands* and the *reflection of light*, is admirably given.

No. 11, is a medallion portrait of Washington, whose countenance will be immediately recognized ; this is a specimen of bas-relief ; the lines are waved, and by the aid of

light and shade, appear raised from the surface. This is a mechanical production.

No. 12, is an Indian viewing the evidences of civilization. The dots and lines which denote the texture of the skin are placed close to each other, thereby giving it a darker and coarser appearance. With this figure, end the artistic specimens, all of which I shall frequently refer to in the sequel.

I shall now examine the mechanical specimens, which the reader will recollect I stated emanated from, and were composed of, a *net-work* of *fine lines*. By looking at the centre of Figure A, the net-work or simplest execution of the geometrical lathe, will be distinctly visible. As the figure increases in size it becomes more complicated, until half a dozen figures are encircled one within the other, all showing different styles of work. The countless varieties of these combinations, formed by aid of the geometrical lathe, can only be equalled by the kaleidoscope. In every figure, however, no matter how complicated it may appear, the lines and manner in which they are woven, will be clearly and distinctly visible. This the reader will perceive in examining the denominations or counters, (except those marked B, which are bas-relief,) also the borders in the opposite plate; in the border C, which is without any figure, the net-work of lines can be distinctly traced; its neighbors, however, are more complicated. These designs

can be made any size for borders, ends, counters and backs; and in examining them, or indeed any work on a bank note, the reader must look closely, as if he were determining the texture of *silk*, or *cambric*.

I would also inform him, if he has not noticed the fact, that the *color* of the *line* is sometimes *black* and sometimes *white*: black on a white ground, and white on a black ground. The black line is the original production of the lathe; but, by an elaborate process, it is converted into a white line on a black ground. The white line is usually adopted in preference to the black one, though the quality is the same in each. The various parts of the note, whether the engraving be mechanical or artistical, are executed on thin squares of steel, after which they are TRANSFERRED ON *cyinders*,—thus becoming the “rolls,” or dies of the bank note engraver.

In using the term *transfer*, it may be necessary to state what is understood by the word.

If you take a coin and press it on the surface of a piece of wax, or any other equally soft substance, certain indentations corresponding to its letters and characters will be produced; if these indentations are filled with ink, and paper, or cloth pressed over them, an exact printed copy of the original coin is the result. In bank note engraving, a piece of softened steel, about three inches square and one-eighth of an inch thick, is selected, and upon its surface

is engraved, either by hand, or machinery the design required. After it is finished in every respect, it undergoes the process of carbonization, or in other words, it is converted into the hardest steel; it is now ready to be *transferred*. This is performed by means of a powerful machine termed a transfer press, weighing about a ton, and capable of exerting an immense pressure; the design is brought under a small cylinder of softened steel, which is rolled over it with such force by the machine, as to take up in *relief* every line in the most perfect manner. The cylinder is hardened, and is then capable of transferring its design on a bank note plate, by being rolled over it in the same manner. I have read in print, objections to this method of multiplying engravings, which I am sure, cannot, for a moment, bear examination.

The argument put forth was, that in case these dies should get into the hands of the counterfeiter, either by his breaking into the engraver's establishment and stealing them, or by purchasing them honestly if the engravers should fail, and their dies be sold at public auction, the country would, in a very short time, be flooded with counterfeit notes bearing genuine impressions.

In a strict argument, both conditions would, of course, be untenable; but permitting the broadest license, let us suppose that one of the present houses should fail, and that their immense stock of dies, &c., were sold at public



auction ; let us suppose also, to shorten the matter, that a counterfeiter has purchased all the dies necessary to make a bank note, — what then ? The possession of the dies by no means makes him an artist : the thief who steals the painter's palette and brush, would certainly find some difficulty in making the picture. After buying the dies, he must of necessity, before he can use them, procure the transfer press before mentioned. This would incur a large expenditure of funds, quite sufficient to place the machine beyond the reach of nine-tenths of the fraternity. It must be recollected that the ordinary counterfeiter is not a capitalist, but on the contrary, belongs to a class of vagabonds whose means are always limited.

The pecuniary obstacle, however, is very trifling, when compared with the danger of having the transfer press on his premises : its weight, in case of a surprise, is so great that it is impossible to dispose of it with any ordinary despatch, and it stands an incontrovertible witness, whose silent testimony is fatal. But waiving these considerations entirely, to put an end to this side-issue, it does not follow that the counterfeiter who possesses the dies, and even has a transfer press at his service, can use them effectually.—Transferring is an art, and like every other art, it has certain elementary rudiments, which must be mastered before any satisfactory progress can be made in it : enthusiasm can never take the place of skill, neither can the workman be

created without the qualifications which experience can alone impart.

And yet it must be admitted that on many of the spurious notes in circulation at the present day, the genuine work of the lathe and designs, not originally intended for counterfeiters, are to be found. To account for this, is not difficult, since bank note engraving, like many other arts, has its pretenders, who, after failing to prove their merit before the proper tribunal, like charlatans, dispense their wares to any purchaser, without questioning his object, or character.

To say that their professional ability being limited, the injury they can do will be trifling—would be advancing a very weak argument, since it is evident that they are only restricted from doing a great injury by the circumstances of the case. It will, I think, also appear plain that their integrity is not influenced by the method, or system of engraving, and that it would be as questionable under any other one, circumstances being the same, as it is under the present. It is remarkable that legislative power has not long since established some means, by which it would be impossible, under the severest penalty, for engravers to execute any bank note work, *without attaching their imprint*, so that in case of fraud, it could be traced. And not only in this particular, but with everything connected with the method of engraving bank note plates, which

should certainly be based on as responsible a foundation, as that upon which the banks are organized.

B. B. are specimens of bas-relief, or medallion engraving, which is used for counters, similar to those given; also for portraits, ends, and ornamental work. By examining the engraving it will be seen that the figure appears *raised*, which is the peculiarity of this work, owing to the shading and manner in which the lines are *waved*.

This engraving should be carefully examined, as it is the same on all genuine notes.

D. E. are specimens of parallel ruling, which is an important branch of bank note engraving, and one that cannot be too attentively studied, since the same machine, worked with similar skill, is used by all the bank note engravers; consequently the engraving produced is the same. The specimens given are about the extremes used. The reader will observe that the title "Bank of Ohio," is formed of these lines, as, indeed, are many of the bank titles in circulation. The shading of the letters is performed by means of this machine, as well as all parallel rulings on the note. The "back," i. e., the lines upon which the words, or denomination, "Five Dollars," appear, should be carefully scrutinized in every instance.

The genuine shading and ruling may be accurately determined by their fine, clear, and strictly parallel lines.

I shall now carefully analyze a GENUINE BANK NOTE, for the purpose of making the reader thoroughly familiar with its principal points, which are so admirably given in the engraved illustrations.



THE PRINCIPAL POINTS WHICH CONSTITUTE

A GENUINE BANK NOTE.

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1.—PAPER.

The paper on which bank note engravers print their bills, is always of a superior quality, possessing a *substantial body* and *fine surface*, and with one or two exceptions, of a rather watery white color.

2.—INK.

The ink is *jet black*, rich and glossy — the gloss gradually evaporating as the note becomes old. The red letters and figures in the centre of the note, are composed of a *network of red lines*, which appear on both sides, and to a certain extent, prevent alterations.

The engravers prepare their own ink, of the best materials, and in the most careful manner.

3.—PRINTING.

The printing determines, in a measure, the appearance of the note: the best engraving, poorly printed, will be imperfect. The method adopted is that usual in printing from plates: the surface is daubed with ink, which fills all the indentations, and is then wiped clean; the province of the printer is to do this without rubbing out any ink which is

required for the letters, or characters engraved on the plate. Bank notes are printed with great care, and every hair line has its due quantity of ink. *See the lettering on the Plates.*

#### 4.—PRESIDENT'S AND CASHIER'S SIGNATURES.

The President's and Cashier's signatures bear a striking individuality, which imitations, no matter how well executed, never possess, and as they are written with freedom, they never present a forced or unnatural appearance. The dating and filling up are generally written by a good pen man.

#### 5.—ENGRAVER'S IMPRINT.

The engraver's signature, or imprint, near the margin of the note is clearly and beautifully engraved, the letters, particularly the capitals, are perfectly executed, without the slightest flaw or imperfect turn in the entire name.—The imprint is never omitted. *See illustration.*

[The only exception to this rule is the Perrin Bank, Rochester, New York. Why this extraordinary anomaly should appear, is, of course, better known to the Bank Department, under whose authority these suspicious-looking notes were engraved.]

#### 6.—LETTERS AND FIGURES.

The letters and figures of the note will be found perfect in every respect; the curves, angles, and hair lines, are without breaks or flaws, and have a finished and graceful appearance.

## COUNTERFEIT BANK NOTES.

The writing "will pay on demand to the bearer," should be carefully studied, word by word, the hair lines and curves, with a little attention become impressed on the mind, and as these are alike in all genuine notes, an immense power is at once gained. See the Plate.

### 7.—PARALLEL RULING. See page 25, D. E..

### 8.—BAS-RELIEF. See page 25, B., B.

### 9.—GEOMETRICAL LATHIE WORK. See page 20, A.

### 10.—VIGNETTE.

The vignettes described on bank notes, from their exquisite beauty and finish, present to the counterfeiter the most serious obstacles. The engravings given in the plates are conclusive evidence of the advanced state of the art, in this country, at the present day.

### 11.—PRINCIPAL FIGURE.

The principal figure in the vignettes of the various engravers, is, with few exceptions, a female: this, from its expressive anatomy and graceful proportions, requires the most skillful efforts of the artist.

### 12.—HAIR.

The hair is neatly and naturally arranged; and on closely examining it, the strands, and the reflection of the light on it, are discernible. See Fig. 2, and Fig. 10.

## 13.—FLESH.

The texture of the skin is represented, as before stated, by fine dots and lines, intermixed: the dots usually denoting the parts upon which the light falls, — as may be seen by examining the forehead of the female, Fig. 10, and the lines denote the parts that are slightly shaded, as may be seen on the neck of the same figure. The shaded part is made by the lines crossing each other at acute angles, forming a beautiful lozenge work; though sometimes but one course of lines is given, especially when the shading is intended to be heavy. Examine Fig. 2, particularly the shaded sides of the arms and neck.

## 14.—EYES.

The eyes are the most important point in the entire note; their principal characteristic being that the *pupil is distinctly visible*, showing the white clearly.

In examining them it is well to look at both at the same time, and the naturalness of their expression will then be manifest. See Fig. 2.

## 15.—NOSE, MOUTH, AND CHIN.

The nose, mouth, and chin, are well-formed, natural and expressive; the lips are slightly pouting, and the chin is well thrown out. See Fig. 2.

## 16.—NECK.

The natural contour of the neck is displayed by the delicate shading, and its proportions perfectly harmonize with the rest of the figure. See Figs. 2 and 10.

## 17.—ARMS.

The arms have their graceful curve ; the flesh, as before mentioned, is represented by delicate dots and fine lines, so intermixed as to convey an idea of plumpness. See Fig. 2.

## 18.—HANDS.

To delineate the hands properly, requires all the ability of the artist.

Observe carefully the fingers, and the natural manner in which they are displayed : the life-like sense of *touch* they exhibit is masterly. See Fig. 2.

## 19.—FEET.

The feet require a like degree of skill ; the *toes* are clearly and accurately defined. See Fig. 2.

## 20.—DRAPERY.

The drapery is neatly and elegantly arranged ; the heavy lines denoting the coarse texture, and the fine ones the ethereal gossamer, which is evidently a fashionable fabric in the regions of fancy. See Fig. 2.

## 21.—MALE FIGURE.

The male figure in no respect differs from the female, except, of course, that it is more masculine, and the dots and the lines, representing the flesh, are closer to each other, and appear coarser ; but the eyes, mouth, hands, feet, and general expression, are determined in precisely the same manner.



Indians have their peculiar dark complexion and muscular appearance ; the white of the eye is clearly seen, and the fingers and toes are properly developed. See Figs. 4 and 12.

## 22.—PORTRAITS.

The portraits, whether representing males or females, are executed in the most elaborate manner ; all the features of the countenance, before mentioned, are admirably given. See Fig. 10.

## 23.—LANDSCAPES.

The landscapes to be found on bank notes, are well finished in every respect, — trees, water, sky, &c.

Trees and shrubs are neatly drawn, the limbs are well proportioned, and the foliage has a luxuriant appearance.

The “still” water is represented by parallel lines, with streaks of white to show the reflection of light, and to produce a limpid effect.

Clear skies are formed of fine parallel lines, and, when clouds, or heavy skies are required, they cross each other.

For trees, shrubs, still water, and clear skies, see Fig. 6.

For heavy skies, see Figs. 3 and 7.

## 24.—DOMESTIC ANIMALS.

Domestic animals of every description, — horses, oxen, sheep, &c., &c., are drawn to the life ; their eyes, limbs and proportions, are perfectly accurate, and cannot fail to impress the reader favorably, with the accuracy of bank note engraving. See Fig. 5.

## 25.—PERSPECTIVE.

The perspective, showing a distant view of the surrounding country, is always clear and distinct,—the sky dies away into distance until it mingles imperceptibly with the horizon. The small figures in the back ground are always exceedingly well engraved. It must be borne in mind, that they are placed there for the purpose of being seen, consequently their outline and general character can always be recognized. See Fig. 1.

## 26.—ARCHITECTURE, SHIPS, AND RAIL-ROAD CARS.

The lines denoting the surface of the materials in buildings, are arranged in accordance with the law of light and shade: hence very fine lines, gradually becoming indistinct, leaving the surface white, denote the part upon which the light falls, and on the opposite or dark side, these are parallel and quite distinct. See Fig. 9.

Ships are well defined, and the canvas has a clear texture. See Figs. 7 and 2.

Rail-road cars are very accurately delineated; in examining a train, observe carefully the car most distant from the eye. See Fig. 8.

I shall now describe these twenty-six divisions of a bank note, *counterfeited*.

The many species of counterfeit engraving used in making fraudulent bank notes,—Photographic, Anastatic, Lithographic, and impressions from wood, copper, steel,

and pewter, all differing from each other, though *equally bad*, when compared with the *genuine* — preclude the possibility of giving counterfeit illustrations with any degree of advantage.

When the reader becomes familiar with *genuine work*, he will then detect *every kind of counterfeit work* without any difficulty — because what is not genuine must be counterfeit.



PRINCIPAL POINTS WHICH DETERMINE  
A COUNTERFEIT BANK NOTE.

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1.—PAPER.

The paper on which counterfeit notes are printed, is of a whity-gray color, rather soft to the feel, and by no means well finished.

2.—INK.

The ink used is generally ordinary printing ink, which is lighter, and lacks the rich lustre of the genuine. The red letters and figures are always poorly executed. Their outline is rough, and the entire work has the appearance of having been painted on. The ink is of a brick color, and the net-work is seldom attempted.

3.—PRINTING.

The printing is seldom well executed: the letters usually exhibiting specks of white, as if the paper had been slightly smeared with grease.

4.—PRESIDENT'S AND CASHIER'S SIGNATURES.

The President's and Cashier's signatures are written by one person, and appear forced and cramped; the dating and filling up are also written by the same person;—the

penmanship on counterfeit notes is generally of an inferior character.

#### 5.—ENGRAVER'S IMPRINT.

The engraver's imprint near the margin of the note is never correctly engraved: the letters, when examined *separately*, will be found imperfect, some of them being quite crooked and otherwise distorted. Notes without the imprint *are bad*.

#### 6.—LETTERS AND FIGURES.

The letters and figures may be detected by their unfinished outline—without the sharpness and neatness of the genuine. The writing or round hand "Will pay on demand to the bearer," is never well executed,—the defects may be more readily noticed in the curves and hair lines, which betray the unsteadiness of the hand that engraved them.

#### 7.—PARALLEL RULING.

The parallel ruling used for shading the letters, backs, &c., is always imperfect: the lines are coarse and seldom parallel: to avoid coarseness, the counterfeiter goes to the opposite extreme, and makes these lines appear as if they had been put on with a brush. By *endeavoring to count them*, the minute breaks, irregular thicknesses and want of uniformity will be discovered.

## 8.—BAS-RELIEF, OR MEDALLION ENGRAVING.

The medallion work always presents a scratchy appearance ; in portraits, the eyes and mouth are imperfect, and the expression is vague.

## 9.—GEOMETRICAL LATHE WORK.

Counterfeit lathe work can be detected by the blurred and dotted appearance of the lines where they intersect each other.

In examining curvilinear figures, begin in *the centre*, and then by gradually following around the circles, one within the other, you will discover many defects which would otherwise be overlooked.

I would mention to the reader, that on many counterfeit, or rather spurious bank notes, the actual work of the lathe is to be found, and though a practised eye would instantly detect it, he cannot expect, without some experience, to be so fortunate ; the figures I speak of are generally made up of small circles, like the centre of figure A.

## 10.—VIGNETTES.

The vignette, when closely examined, will be found coarse and imperfect.

## 11.—PRINCIPAL FIGURE.

The principal figure in the vignette is always the best finished one, the counterfeiter knowing that if this is passable, the surrounding imperfections will not be observed ;

when this, however, is a human figure, particularly a female, his skill always fails, and the following imperfections will be noticed :—

#### 12.—HAIR.

The hair is coarse and clumsy, and has a smoky appearance.

#### 13.—SKIN.

The skin is generally very imperfect ; the dots and lines are coarse and irregular ; the part that is shaded is quite dark.

#### 14.—EYES.

*The eyes are always imperfect.* In the majority, there is nothing discernible but a black speck ; those which are considered well executed, have a little of the white, though the pupil appears to mix even with this.

The distant one is the most imperfect. Look directly at both pupils, and if either is crooked, which is often the case, it will be noticed.

#### 15.—NOSE, MOUTH, AND CHIN.

The nose, mouth, and chin, are poorly formed ; the mouth is simply a black dash, in consequence of the lips being absent, or at best, imperfectly made.

#### 16.—NECK.

The neck is formed by *very coarse lines*, which are in-

tended to throw out the chin ; but this, like all shading in counterfeit figures, will be detected from its coarse and smoky appearance.

#### 17.—ARMS.

The arms have a peculiar disjointed appearance,—as if they were attached to the body by some new method ; the elbow is rather sharper than is natural ; the wrist is dark and not well formed ; the dots and lines which denote the flesh are darker and coarser than the genuine ; the shaded side of the arm is very dark.

#### 18.—HANDS.

*The hands are invariably poorly drawn*, particularly in developing the fingers, which are coarse and clumsy, without any apparent animation. Occasionally the fingers are drawn to a point, and in many cases, the little one is not formed.

#### 19.—FEET.

*The feet are as imperfect as the hands.* The toes are seldom all developed, and the dots and lines are coarse.

#### 20.—DRAPERY.

The drapery is untidy, and arranged in a slovenly manner ; the dark material is of a murky cast, and the delicate gossamer which enshrouds the body, shows many very coarse threads.



## 21.—MALE FIGURE.

The male figure has the same imperfections as the female; the eyes, features, arms, fingers, and toes, are determined in the same manner.

Indians are miserably executed, — their eyes, fingers, and toes being imperfect.

## 22.—PORTRAITS.

The portraits, whether representing males, or females, from the fact that the proportions are large, a superficial observer would likely overlook their imperfections.

The eyes appear foggy, and the shading around them is dark and gloomy; the flesh is dark and has a rough appearance.

## 23.—LANDSCAPE.

The landscape is usually poorly executed, particularly the trees, which look dark and blasted. The lines which represent “still” water, are scratchy rather than parallel, producing a muddy appearance.

The sky is of the same consistency as the “still” water — scratchy and imperfect.

## 24.—DOMESTIC ANIMALS.

Domestic animals are miserably executed; their heads and limbs are execrable, — their eyes are never naturally defined.

## 25.—PERSPECTIVE.

The perspective is always imperfect ; the figures in the back ground can seldom be recognized, and the sky appears to surround every object in the vignette.

## 26.—ARCHITECTURE, SHIPS, AND RAIL-ROAD CARS.

The architecture has a black appearance, and when it is represented in the distance, the lines, which ought to be quite fine, are coarse and heavy. Ships are poorly drawn, the texture of the canvas is very coarse, and the general appearance is artificial.

Rail-road cars are also poorly executed, the lines which denote the surface of the wood work of which they are made, are heavy and indistinct, — the car farthest from the eye is usually the most imperfect.



## ALTERED BANK NOTES.

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There are two kinds of altered bank notes:—those that are altered from a smaller to a higher denomination, and those whose title, or locality has been extracted and some other stamped on.

### WHERE THE DENOMINATION IS ALTERED.

Bank notes altered from a smaller to a higher denomination, can be instantly detected by those who know anything of genuine engraving, in consequence of the striking contrast between the part which has been altered, and the rest of the note, which, like a patch of coarse cloth on a fine garment, cannot be overlooked. The counters are generally extracted and counterfeit ones printed in their places; on examination, the miserable execution will be at once perceived; the letters, or figures, denoting the denomination, are poorly engraved, and their outline and shading are coarse and imperfect. In many instances, however, counters which have been torn off genuine notes are substituted for those extracted, by what is termed the “pasting

process." These alterations can be detected by holding the note to the light, when the parts pasted on will be discovered. The denomination in the *centre of the note*, when examined, letter by letter, will also disclose the fraud — the letters being poorly formed and blurred, and the parallel lines upon which they are engraved, or by which they are shaded, being irregular and imperfect.

Frequently the figure of the denomination is scraped out of the counter, and one denoting a larger denomination, printed in: but no one who has eye-sight, needs be deceived.

#### WHEN THE TITLE, OR LOCALITY IS ALTERED.

The note can be detected, by carefully examining the letters and the parallel ruling which shades them. As before stated, all counterfeit letters, particularly those in altered notes, are poorly formed, blurred and in every instance, without the sharp finished outline of the genuine.

The parallel ruling, out of which many letters are composed, and of which all shading is formed, may always be detected by the coarse and irregular thicknesses, and otherwise scratchy appearance, which it presents. In altering anything in a note, the surface of the paper is very often destroyed: by comparing the texture of the paper *between*



*the letters*, with that which is immediately *above* and *below* them, this defect will be discovered.

The ink of the altered part is duller than that of which the remainder of the note is printed ; this will be noticed particularly in the small letters which denote the locality.



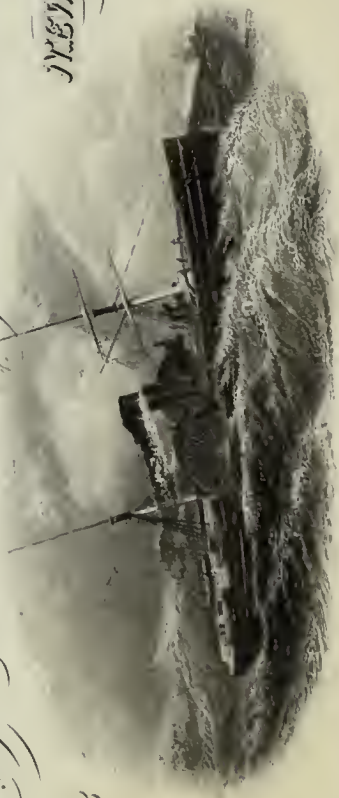






By Randen, Wright, Hatch & Eason, Bank Note Engravers,

NEW-YORK





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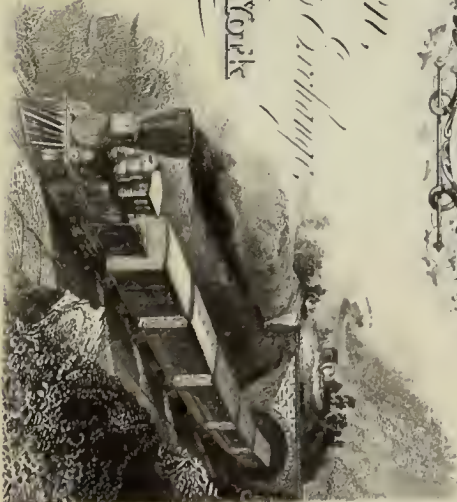
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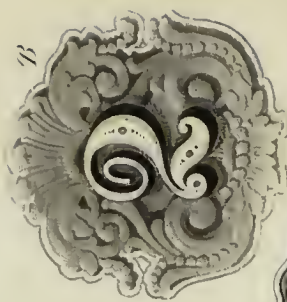
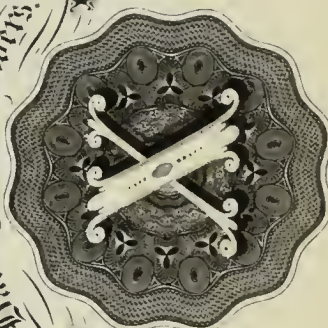
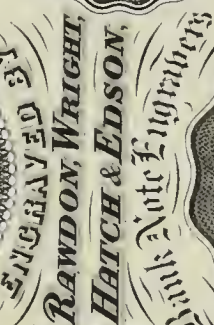
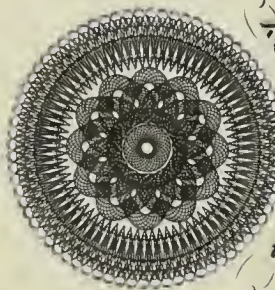
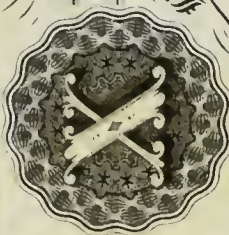
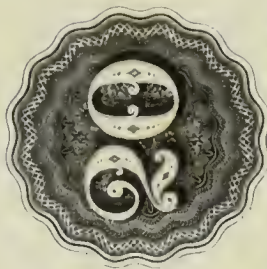


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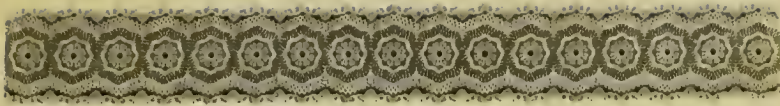






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**RAWDON, WRIGHT,  
 HATCH & EDSON,**  
 Note Engravers,  
 NEW YORK

Rawdon, Wright, Hatch & Edson, New York



*Will pay*

**FIVE DOLLARS**

*and no more*

*to the bearer*

**NEW-YORK,**

*Jan. 1<sup>st</sup> 1856.*

**BANK OF OHIO**

*Empowered by*



**Madison, Wright, Hatch & Edson, New-York.**



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